American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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GUANO—We have received from Edwin Bartlett, esq. New York, a copy of a pamphlet on "*Guano, its origin, properties and uses, showing its importance to the Farmers of the United States as cheap and valuable Manure; with directions for using it.*" This pamphlet contains a large quantity of valuable matter, showing the origin and use of Guano, directions for using it, solution of it, mode of using it in Peru, its comparative value with stable manure, antiquity of bird's dung as a manure, analyses of it, African and American guano compared, spurious guano analysed by Dr. Ure, Experiments upon Potatoes, Barley, Turnips, Wheat, Oats, Grass, Sugar Cane, and Coffee.

The immense success of this article in England is evinced by the fact, that several hundred vessels are now engaged in its transportation; and it being proved that, so far as the agriculture of that kingdom is concerned, its value as a manure is no longer a matter of experiment, we may reasonably expect that the farmers and planters of this country will avail themselves of the lights elicited on the subject by their brethren on the other side of the water, and give Guano a trial with such crops as its efficacy in other quarters may warrant; we shall accordingly give such extracts from the pamphlet before us as may be deemed interesting to our readers, and commence this week with that portion which gives particular instructions relative to the mode of using it, as extracted from a Scottish journal.

Mr. Bartlett, of N. York, and Mr. George of this city, are the Agents of the Peruvian Company for the United States, and have fixed upon a *permanent* rate of prices, (for which see advertisement of Mr. George, on our advertising page)—Those wishing to obtain a single ton, or a less quantity than sold by the Agents, can be supplied by the publisher of this paper on the terms mentioned in his advertisement. ☞Mr. George has also published a pamphlet giving full details for the use, &c. of the Guano, which will be furnished gratuitously to those applying for it.

Whilst upon this subject we would add the following testimony of the value of Guano, to the tobacco planter, by F. G. Skinner, esq. of Prince George's co. Md. son of the Hon. John S. Skinner, former editor of this paper. It is addressed to the editor of the Marlboro' Gazette:

Mr. Wilson—As this is the season for burning tobacco beds, I cannot let it pass without an earnest recommendation to the planters of our county to procure from Mr. Samuel K. George, in Baltimore, at least as much Peruvian Guano as will manure their beds at the rate of 200 lbs. to the acre. I am prompted by experience when I assert that it is probably more powerful, more immediate in effect, and (for certain purposes) cheaper than any manure yet discovered.

My experiments the last season were repeated and various. and in every instance entirely successful; beyond comparison the best Tobacco, both in size and quality I made, was that manured with a teaspoonful of Guano to the hill. I found it equally effective on melons and vegetables. On the Wood Yard estate I am told that there was last year a superb bed of plants manured entirely with a mixture of Guano and Plaster.

The mode of application is, one part Guano and two parts ashes or pulverised earth and one part plaster, sown immediately before a rain. I found it last summer on watermelon, cantelope and cucumber vines, a perfect protection from the striped bug, and I have but little doubt from its extremely pungent odor that it will prove equally efficient against the fly on turnips or tobacco plants.

I recommend Mr. George because I believe his to be the only house in Baltimore at which the genuine Peruvian Guano is to be had. Very truly yours,

F. G. Skinner.

We noticed a week or two since, that we had forwarded two tons of the Guano to a gentleman of Lynchburg, Va. who had before obtained a smaller quantity to experiment with. We have just received an order for several tons from another gentleman of the same city, to whom we had forwarded a small lot in the spring of last year. Although these gentlemen have not informed us to what crop they have applied the guano, yet we take it for granted it was to that of Tobacco.

From Mr. Bartlett's pamphlet on Guano.

Directions for Using Guano.

Many and various minute directions have been given in England for using this manure; and experience will probably suggest better and more economical modes than any heretofore adopted, as the effects of climate upon its action become better known. Hitherto it has been used principally in Peru, where they have no rain, and depend upon artificial irrigation for watering the soil. By this mode of cultivation, the farmer has the advantage of regulating the supply of moisture, and choosing the time of applying it, after manuring; consequently the directions for use there, will not apply to other countries, but may, in some measure, serve as a guide in all, being the result of the experience of centuries. It is a general rule in Peru, to irrigate some days after manuring, and always to cover or mix the Guano with the soil as soon as applied. All the writers in England and in this country agree upon several essential points, among which are the following:

To keep the Guano from direct contact with the seeds and roots of plants:

To use it shortly before or after rain:

To cover or mix it with the soil immediately, when not used as a top-dressing:

When used as a top-dressing, to mix it with three or four times its bulk of earth, or some less pungent manure, that its strength may be diluted and not burn the plants.

From the many directions given, the following are selected:

From the Dumphries Herald of the 30th of March, 1843.

"It should never be given in contact with seeds, as it kills the embryo in germination. For this reason I am doubtful whether it might aid or hurt the first stage of growth, if the seed were previously steeped in a watery solution of Guano. We know that carbonic acid and vinegar are given off by seeds in germination. These acids seem to attract ammonia so powerfully as to kill the germ. This effect will be most decided when the soil is very dry; but it is worth while to try, with solutions of different strengths, whether water will take up azotized matter in a form capable of injuring tender seeds; I wish to try it on red clover and turnip seeds. The Peruvians irrigate immediately after the Guano and crops are sown; the sandy character of their soil and their want of rain makes this necessary. For the same reason they are said to give the manure in divided doses at different stages of growth; neither our soils nor situation admit of general irrigation, nor do many of our crops admit of repeated manuring on the large scale, but we have in mixtures a substance more suited to our soil and climate than irrigation would be.

"As the lumps are too strong, the Guano should be put through a fine sieve, and the lumps thus seperated should be broken and put through the same sieve; this will be best done during the operation of mixing; but before proceeding to it I may mention a fact which farmers would do well to attend to. Guano rapidly absorbs moisture from the air, and this absorption increases both with the moisture of the air and the value of the manure.

By drying two specimens of different values for an hour at 150 degrees, I found the worst lost 15 per cent. between water and ammonia, the best lost 22¼ per cent.; and by again exposing these specimens to the open night air for an hour at 35°, the worst recovered nearly 6 per cent., and the best rather more than 8¼ per cent moisture. Inference 1. Guano is constantly gaining weight. This would add much to the profit of retailers, if it were not for the fact that part of this moisture (in mild weather), goes to aid the decomposition of the organic matter, and its escape into gas. Hence, 2. Guano is constantly losing value, and this loss is proportioned both to the value of the article when imported, and to the warmth and humidity of the air in which it is kept. 3. Hence, the farmer will find his profit in purchasing that which has been recently imported (if valuable) and in mixing it as soon as possible: for, if too damp, it will not pass through a sieve; much will be lost; and if he attempt to dry it by the heat, he will lose much more. If any has already become too damp for economical use, it may be mixed with at least its bulk of dry but cold mill-dust, bran, or tail oats, well dried and ground in the mill. This will absorb much of its moisture, reduce it to a workable powdry state, and increase its value as a manure, without expelling its ammonia.

"The objects of mixing Guano are, 1. To partly disinfect it by absorbing its volatile products and diminishing its smell. 2. To separate its active particles, and thereby diminish their action on each other. 3. To present it to warm soils in a form in which its action will be less violent at first, but more protracted and steady than when given in an unmixed state. Of course, the colder the soil, and the earlier the season when sown, the less the quantity of mixture is needed, and conversely. But, as a general rule, it should be mixed as equally as possible with four times its bulk of finely-sifted, moderately-dry black or brown colored earth, or peatty matter, saw-dust, slightly-burnt clay, charred turf, coal or peat ashes,—whichever of these substances can be most conveniently had. Perhaps newly-burnt charcoal, used as soon as cold, is the best matter that can be had for mixing; but as it can seldom be at the farmer's command, any of the above matters will answer in its stead. Where a considerable quantity of useless wood can be had, it might be piled up, surrounded, and nearly covered with clayey or spatty turf, and burnt with little admission of air. When cold, the charcoal, clay, and charred turfy matter, if well broken with a spade, mixed, and put through a sieve, will make an excellent mixture for Guano, especially for light warm soils. Some have mixed Guano with sand, and when for a cold clayey soil this mixture seems very suitable; only sand need not be given in more than double its bulk, and should be put in the soil soon after mixing, whereas any of the other mixtures may, with advantage, stand beat up under cover, for a week or more, according to the weather, character of the soil, and distance at which it is to be put below the seed, and also in proportion to the quantity of Guano given to an acre. The colder and heavier the soil, and the colder the weather, the more slightly the manure ought to be covered, and conversely. No rules can supersede experience in this. When either dung or bones

are given as part of the manure, and when the soil is moderately moist, or disposed to clay or peat, the Guano should be put near the seed. Again, where the ground has just been limed, the Guano ought both to be given in a large quantity of mixture and covered rather deeper than in ground not limed for a year or more. On light soils lime should, if possible, be mixed some weeks before Guano is given. As lime rapidly expels the ammonia from Guano, it soon renders the manure inert. No farmer who understands the matter will mix either Guano, or dung, or bones, with either slacked lime or fully-burnt wood ashes, or burnt couch, unless the couch be well mixed with earth, and have stood sometime in the heap after it is cold. Any of these substances, if in contact with Guano, drives off its ammonia. Although Guano, slightly mixed, may be sown above bones, yet bones and Guano ought not to be mixed before they are sown, as they act on each other, if good, and the readiest part of the manure is thus dissipated before it reaches the soil. A mixture of gypsum with Guano can seldom do any hurt, and for turnips or clover, on light soils, it may often be advantageous. When our turnip soils are very dry at sowing, it might be a great advantage if the top of the drills could be watered with a weak solution of Guano. This might be done at no great expense, by a watering pan having a very small nose, perforated with only three or four small holes, so as to spread the liquid but little. A woman might go steadily along with this pan, followed by another with a supply of liquid, a large barrel or tub standing at the upper end of the drills. If this be found beneficial, a machine might be made to carry a larger supply, and water two drills at once. It is likely that the watering would both disgust the turnip-fly, and quickly put the plants beyond its power.

"From 60 to 70 per cent. of good Guano are either dissolved or readily suspended in water. The solution may be tried at different strengths, from ½ to 1 cwt. per acre of the powder. This would require about 160 gallons of water, or 1 gallon per perch, or 40½ yards' length of a 27-inch drill. It may be difficult to make less liquid go over this length, and a larger quantity may be found inconvenient in practice. The undissolved parts of the Guano may be mixed in sand or mould, and used as a dressing over dung for later turnips, or composted for after-use on grass.

"*Quantity of Guano per Acre.*—This is not so easily determined as some gentlemen seem to think. The character and state of the soil, the locality where it is used, the period of the season when it is given, the kind of crop intended, the previous manure and system of cropping, the natural action and durability of Guano as a fertilizer, the quality of the article used, and the amount of expectation contemplated, have all to be taken into account, and may vary the quantity from 2 cwt. to 8 or 9 cwt. per Scotch acre* when given alone, and half of the above quantities when a due proportion of dung, bones, or rape-dust is given at the same time. When the soil is naturally warm, and has been brought to a high state of fertility, and where the farmer's interest in the land extends over only four or five years, he will most economically promote it by giving merely enough of Guano to start the plants with vigor, and, after a year or two, a light dressing of some suitable saline manure. If allowed, he may very cheaply 'take his own out of the soil,' in this way, and leave it as poor as he could wish.

We have heard much of the solar light enabling the leaf to decompose carbonic acid, and of the plants receiving their carbon from the atmosphere. In hot and tropical climates, where sunshine is more abundant and steady, and where the rays are more direct and powerful, there is reason to believe that this is true to a considerable extent—(the large size of leaves and blossoms, compared with ours; the comparative general deficiency of vegetable matter in tropical soils; the beneficial excess of saline matter there; and every other analogical fact, confirm this supposition)—but in our climate, where the heat is much less, and where the sun's rays are both more oblique and clouded during much of the season, little atmospheric carbon can be appropriated, except by our green crops, and therefore the supply must be chiefly afforded by the soil. Whatever, then, causes the evolution of more carbonic acid from the soil than it brings to it, gradually exhausts the soil not only of carbonic acid, but also of the bases dissolved and carried from the soil by this acid. In the soil, any alkaline matter, as ammonia (from Guano, dung, or bones), lime, and most of the salts, dispose the formation of carbonic acid, and commence a general fermentation, which extends to the dead vegetable matter in the soil, and gradually reduces its quantity. Where the vegetable matter is in a very inert state, and soil the is coarse, as in clayey land recently drained, either lime must be given in a previous fallow (and when practicable, this ought to be done), or the manure must be good farm-yard dung, not over fermented, as the Guano must be given in a heavy dose (say five to eight cwt. at least per acre, put in and covered moderately deep some weeks or months, if practicable, before the seed); for in these soils it requires much to begin fermentation so effectually as to act on the inert soil, and bring it into a fertile state. A good turnip crop may be used on such soils with less Guano, but then the following white crop will show that the manure was wasted before the *inertia* of the soil was overcome. On the contrary, a soil which, by judicious culture, is already disposed to fermentation, may be made to yield crops for several years, by using repeated and varied small doses of ammoniacal and calcareous stimulants of salts, with occasionally a little dung, till the soil is reduced to ruinous barrenness. In warm, light soils, it will require considerable management to give enough of good Guano to carry through a rotation without injuring the crop at first by its violence. Two or three cwt. per acre may be proper, if given alone; but much better give half dung or bones, and half Guano, for such soils. Cold, high, clayey soils, even though under previous good management, will take four or five cwt. per Scotch acre, according to their exposure; and if (as it is too often the case) lime or dung has been given them too sparingly, they may require more."—*P. Garden, Glenæ, Dumfries.*

"*Liquid Guano.*—As a liquid manure, 4 lbs. of Peruvian Guano to 12 gallons of water are sufficient. The water should stand 24 hours before use, and when drawn off, 12 gallons more may be put to the same Guano."

* A Scotch acre is equivalent to 1¼ English or statute

Potato Disease.

The following communication was addressed to the Hon. Levi Lincoln, as chairman of the Legislative Agricultural Association, who placed it in our hands for publication in the Farmer, if deemed worthy of insertion. We know that our readers, and the agricultural community in general, are anxious to get all the information upon a matter so deeply interesting to the farmer, and we are, therefore, glad to have it in our power to present the views of those who have devoted attention to the subject, although their theories may not meet our assent. In the present case, we do not agree with the writer as to the cause of the disease. A scientific friend to whom we submitted the article, thinks the writer's idea of the carbonic acid of the atmosphere, is not sound,—that to ascertain to a nicety the quantity of carbonic acid in a given portion of the atmosphere, is an experiment of the greatest difficulty, and could not be managed as easily as he thinks; nor would it lead to the desired result, although it is well ascertained that a large excess of carbonic acid is injurious to vegetation.—*Ed N. E. Far.*

South Boston, Jan. 18, 1845.

Sir—Having heard the greater part of the discussion on Tuesday evening, I have taken the liberty of addressing you on the subject, the interest you take in the success of agriculture, leading me to believe it is a liberty you will excuse.

I had not the pleasure of hearing the gentleman who first spoke on the subject, [Mr. Teschemacher,] but from the observations which were made by the different speakers, I was led to the conclusion that he had assigned no cause for the disease. [A mistake.] From all that I could learn, there has been no particular system of manuring or cultivation adopted that has been entirely exempt from the disease, unless we except the case mentioned by Mr. Cole, where lime was used in the hill, and a small quantity afterwards spread on the surface, and the other of a gentleman at New York, where pulverized charcoal was used. But even these cases, as I did not hear of the same course of cultivation having been pursued in other places, I am almost inclined to class among those fortunate places that the destroyer spared, and to look in another direction for the origin of the disease.

My observations of the disease are entirely confined to England, as I did not arrive in this country till after the crop was housed; and as I left there before the great bulk of the crop was raised, my remarks will be confined to what fell under my own observation.

On the 27th of May, I planted in my garden 40 square yards with blue potatoes, the manure on which had been dug in in the autumn, the ground being lightly forked previous to the planting. This, I may observe, is rather later than potatoes are usually planted. The vines came on very well, and up to the beginning of August, there was every appearance that I should have a good crop. But about this time, we had several days of very hot weather, with the wind in the North-east, and the nights exceedingly cold. About three or four days after this weather commenced, I perceived that several of my currant trees were attacked with honey dew, and these potatoes in particular, the tops of the vines being all curled up. In a few days, the vines were covered with green aphides, and in about two weeks the vines all died, (some in a day or two,) parting at the root the instant I laid hold of them. I immediately dug them up, and I had not a peck from the plot: there were none larger than marbles, and they did not appear to have grown from the time that the honey dew had come on them. I did not perceive any disease in the potatoes, and I threw them to the pigs. The seed was from quite a different soil. At about three yards' distance from the above, with a row of currant bushes between them, and with another row between them and the sun. I planted, on the 6th of May, an earlier sort of potato. These were not in the least affected with honey dew, and were an excellent crop. I had not perceived any aphides previous to the honey dew, but I was led to expect them, having always observed that the hop plant, which is very liable to the attack, always (unless heavy rain or thunder showers immediately follow it,) becomes what the planters term lousy. Several of my neighbors' crops that were planted late, were cut off in the same way, and some of the early ones suffered, but not to such an extent. How those have kept that have been raised, I cannot say.

My opinion, deduced from these observations is, that the disease proceeds from atmospheric action, the first symptom of its attack presented to our notice, being the honey dew. This dew, as it is called, I conceive to be caused by a sudden current of cold coming in contact with the plants at a time when all their pores are open, and they are in a state of what may be called perspiration: the suddenness of the attack prevents the plants from accommodating themselves to the temperature of the surrounding atmosphere, and the pores are suddenly closed; the exudation on the leaves and vines is not taken up by the atmosphere, but becomes fixed on the plant, hermetrically sealing the pores; and, as in the animal, as in the vegetable economy, disease is produced. The roots, therefore, being cut off from their supply of carbon through the vines, direct all their energies towards the diseased parts, and the tuber no longer receiving any nourishment from them, and being unripe, it is not in a condition to dispense with the nourishment, and becomes diseased, the extent of the disease being regulated by the maturity of the tuber at the time of the attack.

If it is asked how do I account for one portion of a field being affected and not the other, my answer is, that the intensity of heat or cold with which a current of air is felt by any body, is always regulated by the temperature of the body so acted on: thus one portion of a field may, from the nature of the soil, its situation, or the extent to which it is covered with any vegetation, have radiated heat in a greater or less degree than other parts, or the current of air might not have been of that width as to take in the whole field, or it may have crossed it in a particular direction, or it might have been more sheltered in the direction from which it came. I did not observe that any of the speakers said that a plot here and there in the same field, was affected, but it was either one side or one end, or the whole of the field was affected—showing, I think, sir, that the current of air proceeded in a direct line.

Presuming that the disease proceeds from the causes I have stated, and as from the experiments of Liebig and De Saussure, it has been proved that winds blowing from a cold point, contain a greater portion of carbonic acid than those from a warm one, the question may be asked—Do plants, though they take from the atmosphere the carbonic acid which would be injurious to man and animals, when they have the carbonic acid presented to them in what may be called as excess, or at a time when they are not in a condition to take it properly into their system, become what may be called surfeited with it, and so sicken? This question I must leave for those better skilled

in the physiology of plants than I am, to determine. Presuming, however, such to be the case, the question then arises, what effect will be produced (as in the case named by Mr. Cole,) by the sprinkling of a small quantity of lime among the plants, which by its affinity for the carbonic acid, may assist the plant in depriving the current of air of its constituent parts and possibly change its temperature. This is an experiment which I really think is worth trying, and which might be done by almost any practical chemist having the means at his disposal. There is another plan which I should try, if I ever perceived a similar attack, and that is, to cut the vines off as far as they were affected, with a sharp knife, and throwing a little soil or dust on the part, to check the bleeding, removing the vines so cut to the compost heap. My reason for thinking that this would have a beneficial effect is, that last May, my early potatoes were cut off by a severe frost; the greater part of the vines turning quite black. I immediately applied the knife to the greater part of them, in the same manner as I have recommended above: the result was that those that were cut gave a fair average crop, while the others either died away or shot out short brushy tops, and the produce was scarcely worth getting up. Several of my neighbors, on my recommendation, pursued the same plan, and with the same result.

My letter has extended farther than I expected, but it is a subject I feel so much interest in, I could scarcely say less. Apologizing for taking up so much of your valuable time with the perusal, I remain, sir,

Your very ob't serv't,

R. LAWRENCE.

HON. LEVI LINCOLN, *Presid't, &c.*

AGRICULTURAL IMPROVEMENT IN VIRGINIA, MARYLAND, CAROLINA, &c.

In unison with the views of sundry Southern gentlemen who are warmly interested in agricultural improvement, and in accordance with the inquiries of various friends in the Northern States, the undersigned are collecting statistics illustrative of the vast field for enterprise presented by the uncultivated lands of the South. The delapidated estates, as well as the virgin soil, in various sections of the old Southern States, present attractions which would not long be slighted, were the facts generally known. Thousands of enterprising emigrants from the Northern States would annually select Virginia in preference to the Western Country, were her advantages presented in a manner calculated to arrest their attention. At present, all the Guide-Books for Settlement point exclusively to *the West;* while examination and reflection will probably satisfy any intelligent man that the world no where presents a better field for enlightened enterprise than is furnished by the millions of acres which now invite improvement in the high-land regions as well as in the tide-water section of the "Old Dominion."

The natural advantages of Virginia are unsurpassed by those of any country in the world. The richness of the soil in large sections of the Commonwealth still defies the exhausting influence of improvident cultivation. Even the "worn out estates," as they are sometimes styled, abound generally with mineral and fossil manures, admirably calculate to replenish the soil wherever mismanagement has robbed it of qualities essential to successful farming. The land abounds not only with these manures, but with other mineral treasures of incalculable value. The mountains embowel iron and coal, transcending in quantity any possible requirements of the largest population which could be crowded for centuries within that ancient Commonwealth; while the lime, marl, and other natural fertilizers, abundant nearly every where in the State, furnish inexhaustible and cheap resources for rendering Virginia one of the richest agricultural regions of the earth. The Atlantic and the Western waters, with numerous bays and rivers penetrating various sections, furnish facilities for commerce with other countries, as well as for easy communication between the people in nearly all quarters of the Commonwealth. The value of the fisheries is largely experienced, not merely in the tide-water region, but to a great extent through the interior; and what territory any where surpasses the Virginia mountains in qualifications for sheep husbandry? Superadded to all these considerations, and equally important with any of them, is the mildness of the climate—an attraction alone sufficient to render Virginia desirable to thousands of enterprising settlers, who, when abandoning their homes in the North, would prefer the Southern temperature if it could be enjoyed under advantages like those presented by the Western States now most rapidly accumulating immigrant population.

The Men of Virginia, familiar with the career of Washington, need not be told that, with such extraordinary combinations of advantages, the "Old Dominion" would not now be *razeed* in the scale of States, if the spirit which influenced that illustrious patriot had been continually applied for the last half-century towards the advancement of that Commonwealth in the career which he foreshadowed for her in Agriculture, Commerce and Manufactures, additional to all her political renown.

The intercourse and correspondence with which the undersigned have been favored by many distinguished Virginians; and also by gentlemen of other States, such as Maryland, Kentucky, the Carolinas and Tennessee, together with personal observation and much inquiry among the farming community—induce the belief that *a systematic effort for promoting the sale and settlement of uncultivated lands in those States*, may now be made with strong hopes of successful results. Under these circumstances, it is deemed essential, by various Southern gentlemen, as well as by ourselves, to collect all practical information concerning the condition and practice of lands in the regions above mentioned, and all other information which the friends of improvement may choose to communicate, for the purpose of extending a knowledge of the advantages presented for settlers. The gentleman to whom this circular is addressed may therefore promote the object, if he approves of it, by communicating to the subscribers such facts as he may deem proper concerning the number, extent, soil, condition, price and products of estates for sale in his vicinity, with the names of the owners or occupants; including particulars concerning the proximity to water courses and mineral manures; and maps of lands should, when convenient, accompany the descriptions. Where the lands are now, whether in in the mountains or otherwise, it is desirable to know the probable advantages for sheep husbandry and grazing generally, as well as the grain growing, especially as the high lands of the Southern states are beginning to attract, as they may be made to attract largely, the attention of wool growers and graziers—while the vast water power abounding in those regions, amid inexhaustable supplies of fuel, iron, &c., should be specified, as offering multitudinous inducements for extended manufacturing operations.

Gratified to find that the views here briefly expressed have met with the cordial concurrence of gentlemen from the several States above-mentioned—gentlemen whose approbation encourages this mode of acquiring and diffusing information concerning the inducements for enterprise presented by the uncultivated lands within the borders of those States—the undersigned will close for the present, by mentioning that their connection with the friends of Agriculture in various quarters satisfies them that the diffusion of accurate information is not only necessary to attract enterprising settlers, whose capital and industry would speedily bring into profitable cultivation millions of acres scattered in tracts of various sizes over all sections of Virginia and the adjoining States.

JOHN S. SKINNER, *Washington,*
(Former editor of the American Farmer.)
HENRY O' RIELLY, *Albany,*
(Of the N. Y. State Agricultural Society.)

December, 1844.

From the Boston Cultivator.

SHELTER FOR LIVE STOCK.

Messrs. Editors:—On the subject of fences upon a farm, I would observe, whatever be the decision as to the size of the enclosures, we are in justice and common humanity, bound to protect our animals, when exposed to the vicissitudes of the seasons while grazing them, by the erection of shelter, whether by walls or otherwise. And I must be permitted to observe, in this particular we are lamentably deficient, negligent and careless; few of us ever taking into our consideration the sufferings of the poor creatures when so exposed, or the loss that is likely to be experienced for want of such an arrangement. Even in late spring and early autumn, occasional storms fall out, the miserable effects of which all must have had cause to deplore, but might have easily been guarded against by a very simple and not expensive erection, whether a wall or board fence in the form of a cross, which would afford shelter from every wind that blows.

But I am aware, that many will smile at the idea of erecting fences for the shelter of our stock while in the fields, considering it quite beneath their notice, and a useless expense; but if they could be brought to see the value of such an arrangement on the condition of their live stock, they would have to rejoice that such advantages might be secured at comparatively little labor or cost. I will venture to assert, that there is not one of us who has not often grieved to see his poor animals ranged under the shelter of an open fence, wet and shivering to the bone, and eyeing the storm with a deadly cast of countenance, enough to make an *honest* man shudder! Assuredly, no one is justified in exposing any part of *his family* to those cruel hardships, when they have the means in their power so readily to alleviate them. And as it might have the means of wakening their sympathy, were they to read an account of a storm which fell on a part of the Cheviot hills in Scotland, in the year 1794, I will transcribe it from Hogg the Ettrick Shepherd's Tales, premising, that the writer of this is personally acquainted with two shepherds that were on the spot at the time, and suffered the horrors of that terriffic night; and who cannot, even at this distant day, think of it without fear and trembling; several of their friends having been overwhelmed and lost.

Your constant reader, D. P.

From the Prarie Farmer.

TO PRESERVE FRUIT TREES FROM RABBITS.

By J. M. Hurd.

Messrs. Editors:—A year ago last spring a friend made me a present of near 100 apple trees of choice grafted fruit. I valued them very high—took great pains in setting them out, and to my mortification the rabbits commenced upon them soon after. I staked and wrapped them with straw, but the stakes would get down and the straw get off. So that in spite of my watching, there were but 12 alive at the end of the year. I procured trees from Alton and reset them, and procured ammunition and 3 rifles to work upon the little "varmints" and after killing hundreds of them, we saw they appeared as plenty as ever, but by vigilant watching kept off until the 1st October, when they made their "efficient commencement." A neighbor informed me that sulphur and grease would keep them off and I mixed about ¼ lb. flour of sulphur with soft grease enough to make a thick paste. Then with my hand smeared the trees from the ground 2 feet up, and since that time not a tree has been touched. I had seen many preventives recommended in the papers, but was afraid of any composition of grease. Sulphur can be put on with so little grease that I think it perfectly safe.

Otter Creek, Jersey co., Ill., Jan. 6, 1845.

MARTIN'S IMPROVED BEE HIVE.—Mr. L. M. Leach, of North Carolina, yesterday called upon us and exhibited a model of "*Martin's Improved Bee Hive*," which appears in every respect calculated to answer the purposes for which it is intendid. The main object of this improvement, the comfort and convenience of the Bees, and the ease with which the Moth can be discovered and destroyed, without disturbing the colony in their operations, is manifest to the most superficial observer. We have never heretofore had the management of these industrous and valuable insects, being somewhat deterred by witnessing the trouble and annoyance which others have experienced, but having no doubt that this improvement will remove all difficulties, we now intend to have a hive built on the model shewn us, and will hereafter be pleased to exhibit, to any who have curiosity in such matters, the utility of the improvement, and publish the practical results at some future period, when experience has enabled us to speak with certainty of the benefits to be derived.—*Cheraw Gazette.*

Continuation of Milk in Cows.—Extract of a letter from Mr. Calvin Butler, Plymouth, Ct., to the editor: "On the subject of keeping cows in milk from year to year, I have some experience. It is not true that cows kept constantly in milk, will, after a lapse of years, fail their milk. I kept one in milk five years, and she increased in her milk every year, and it was almost impossible to dry her when I turned her to beef. I am now milking one for the third year, which neither gains nor fails in her milk, and I presume would not, should she be milked ten years. My cows have been kept from the bull—not spayed."—*Alb. Cult.*

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

VALUABLE SEEDS—We are under renewed obligations to the Hon. Mr. *Ellsworth*, Commissioner of Patents, for another package of valuable Seeds, for distribution among our patrons; and we shall be happy to make such a disposition of them as will effect the object of the patriotic donor—for we hold it that he is the *true* patriot as well as philanthropist, who thus uses the means placed at his disposal to extend the comforts of the people, and the prosperity of his country. The package comprises the following kinds, viz:

Polish Oats, very large and heavy, seed of 1844.
Multicole Rye, (best kind,) sow in fall. do.
Rice, seed of 1844.
Italian Rye Grass, (seed imported from England;) sow either spring or fall. It may be sown alone, or mixed with clover or other grass seed—Seed of 1844.
Spurry, (seed imported from England, 1844,) fine winter pasture for sheep and cattle; sow in the fall; also excellent for milk and butter.
Large Oregon Corn, raised by H. R. Smetser, Maryland—seed of 1844.
Smith's Extra Corn—seed of 1844.
Egyptian Corn.
Early Sugar Corn—seed of 1844.
Small Corn for pickling.
Improved Dutton Corn—151 bushels shelled corn per acre—seed of 1844.
British Queen Pea—new, and imported from England. Very superior kind of (late) pea. Seed of 1844.
Waterloo Blue Pea, late dwarf, imported, seed of 1844.
Winter Wheat, seed of 1844.
Tuscany Winter Wheat.
Early turnip rooted Beet—seed of 1844.
Half long blood Beet. do.
Horticultural pole Cranberry Beans, seed of 1844.
Porter's Chilian Pumpkin, do.
Double or curled Parsley, do.
Round Savoy (extra) Spinach, do.
Victoria Rhubarb, do.
Silver Giant Celery, do.
Cup (extra) Parsnip, do.
Extra long green Cucumber, do.
Brown Mustard, for field crop. Crop of 27 acres, brought $1,600.
Low Pear Tree Tobacco—fine gold silky leaf.
Genuine Havana Tobacco—and *California Tobacco.*

POUDRETTE—It will be seen by their advertisement, that Messrs. *Brice & Smith* are prepared to furnish Poudrette from the Lodi Company. As we have the article on hand and intend to supply orders as heretofore, for that manufactured by the New York Company, those desirous of using this valuable manure, have the opportunity of testing the difference in effects, if any, between the production of the two establishments.

TERM OF RENTING FARMS.

We have so often heard it said of lands in the occupancy of tenants, that they had been killed by being rented out, that we begin to think there must be something radically wrong in the system of letting out farms, as every effect must have its cause. What the error in the system is, appears to us to be a serious inquiry, as very deep interests are involved in the issue—interests which not only affect the present, but look to the future with fearful import. There is nothing in the relation of landlord and tenant, which would necessarily make the latter so inimical towards the former, as to voluntarily do any thing to impair the fertility of the soil of an estate in his tenancy; but on the contrary, if each observe the bearing that they should toward the other, that relation should create a mutual interest in each other's welfare. Why then is it that lands deteriorate so frequently in the hands of tenants? *May it not be that the term of our leases is too short?* We ask the question as much with the view of eliciting information from others, as of advancing an opinion, for tho' we have long thought that this is one of the causes, yet we believe that there are others also, and should be pleased to see the subject receiving all the attention which its importance deserves.

In England a very large proportion of the *soil* is held by *tenants*, and yet, in the main, the fertility of that soil has been, for the last half century, increasing in fertility, and this melioration is there going on, notwithstanding many English tenants pay yearly per acre, a sum which in this country would buy out the fee simple estate; besides the English tenant is subject to a series of income taxes, equivalent in value almost to the yearly rent of an American farm; nor is this all, for under all these disadvantageous circumstances of high rents and onerous taxes, many of these English tenants get rich. We are aware that the *lowness of wages* there operates in favor of the renter of lands; but that cannot be the sole *cause* of his success. What then is it? May it not be that, in the *tenure of the lease*, the English tenant finds his inducement to make his outlays looking to the improvement of the soil? There, the terms of leases range from 14 years to a life time, and in some instances from father to son, and we have read of some of the more opulent tenants incurring outlays of several thousand pounds, at the commencement of their leases, in the purchase of lime and other fertilizing manures, and finding themselves repaid by increased products for their expenditures. The *length* of the English lease then, holds out inducement to the tenant to expend his means freely, and he wisely makes his expenditures at the beginning of his lease, in order that he may reap the benefit of the improvement. Thus encouraged, he sees it to be his interest to buy manure, and the consequence is, that both he and his landlord profit by it.

The system of letting lands, however, is far different in our country. Here the generality of farms are let from year to year, a few for three years, and still fewer for a greater number; so that the tenant if he should have the means of buying manure, is left without the inducement to expend his money in its procurement; for he reasons to himself thus—"If I improve my landlord's farm, at the end of my term he will either turn me off or exact a higher rent." This is a selfish and short sighted policy; but it is still one that finds an apology in the very infirmities of our nature, and is not devoid of a smack of that shrewdness peculiar to our people.

Would it not then, be for the mutual interest of both landlord and tenant, if the *term* of our leases were extended sufficiently long to hold out an inducement to a tenant to look to improvement as an important source of profit? We think it would. And we think also by the way of giving impetus to the spirit of improvement, that the landlord should so graduate his rents, that the tenant should be called upon by the two-fold motive of interest and duty to improve as well as till the soil—that he should find it to be his interest to *put something into, rather than take all out of the land in his tenancy.* The lease might stipulate that a certain number of bushels of lime and plaster should be put on the land yearly, or at all events during the term of the lease, and that the tenant should also sow a certain number of bushels of clover seed. To bring about this desirable result, the *rent* should be so arranged as to price, that the landlord would be made to bear a just proportion of the outlay, and look to the improvement of his land for his consideration.

If such a change in the relation of landlord and tenant could be brought about—could only be once started,—its evident advantages would be so apparent that it would become popular, and a few years would be sufficient to effect such an improvement in rented lands, as to create a new aspect on the surface of this goodly country of ours; for *interest* would overcome *selfishness*, and men, in the furtherance of that *interest*, would be induced to be liberal to the land and just to themselves, so that, we should, in a few years, have the pride and gratification of beholding a very different order of men occupying the relation of tenants to those who now fill that station; men of competent means to improve a farm would prefer to take a lease of 14 years to purchasing, because they would feel assured that their true policy consisted in so doing.

HUSSEY'S REAPING MACHINE—The following tribute to the superiority of our ingenious townsman's Reaping Machine, is from an extensive farmer in the fertile wheat growing district of the Old Dominion. It is copied from the *Albany Cultivator:*

Mr. Editor: I believe that if there was a more general correspondence between the farming community through the medium of agricultural journals, and their experience more generally imparted to each other, with regard to seeds, their qualities, varieties, &c. we should be much benefitted thereby. There is nothing, perhaps, from which greater results would accrue, than a general information as to the constant improvement of tools and machinery generally applicable to agricultural operations. We hereabouts, see in some of the northern papers, about once a year, that they have had a ploughing match, and that some maker receives the premium for his plough, possessing many advantages over others. This is generally the last we hear of it.

Of all the agricultural implements which have come under my notice for years, I think there is none more worthy of special notice than Hussey's Grain Reaping Machine. I have used one for two years, and am satisfied that it is competent to perform what Mr. Hussey sets forth. Since his improvement in adding the fore wheels, it can cut 20 acres of wheat in a day, and the work is perfectly done. Another great recommendation is, that the machine is permanent in all its parts. I have used mine for two years, without having previously prepared the ground by removing stone and other obstacles, and have broken no part, and find nothing giving away. Many of our farmers were prevented last year from procuring machines from Mr Hussey in consequence of understanding that some of M'Cormick's would be sent to the county on trial. They were sent, and as readily taken on trial. I did not see them work, but enquired of the gentlemen who used them very particularly as to their operation, feeling interested myself in the result of the trial, and was in every case informed that M'Cormick's were not comparable with Hussey's. One very serious objection to M'Cormick's was that the hand who pushed off the grain, follows the machine on foot, necessarily the machine must go very slow; and then, from the manner in which the grain falls on the platform, it is much tangled when it is pulled off in the sheaf. This objection does not apply to Hussey's; the raker rides on the machine, and can with ease do very good work. I am ignorant whether it has been tried in your fine Genesee country. If not, it should be next harvest, and I think without doubt, it would give general satisfaction. Respectfully, yours,

L. W. WASHINGTON.

Hall Town, Jefferson Co. Va. Dec. 19, 1844.

REPORT OF THE COMMISSIONER OF PATENTS.

The tabular estimates of the agricultural productions of the U. S. for 1844, have been presented to Congress, in the Commissioner of Patents' Report, just made; the mass of information embodied in this report, shows the growth, increase and prosperity of agriculture in this country. Much attention has recently been paid to this branch of our industry, and various societies have been formed to promote improvements in agriculture. The discussion at the farmers' clubs have contributed much towards disseminating useful information, and agricultural papers and books are constantly increasing. Volumes of great merit on the subject of agricultural industry, also have been published during the past year; and the results of the experiments of foreign agriculturists are now becoming more easily accessible to the farmers of our coun-

try. Science has already conferred immense benefits on this portion of people. By the aid of chemistry, it is asserted that the wheat growers of France have succeeded in doubling the product of wheat in that kingdom, and now annually harvest more wheat than is grown in Great Britain and the United States. Science, too, has enabled the agriculturists of England, not only to cut twice as much hay from an acre of land now as they did twenty-five years ago, but to keep twice as many cattle, sheep and swine on the same amount of food they did; and of course to make twice as much beef, mutton, and tallow, wool, butter and cheese, from any given amount of vegetable food.

In compiling the tables contained in the report of the Commissioner, Mr. Ellsworth, some advantages have been enjoyed for a nearer approach to accuracy, with respect to particular crops, than was the case in the former reports. The population of the United States is estimated at 19,183,000. The number of bushels of wheat raised in 1844, was 100.310,855. Twelve millions and a half bushels by New York state, twelve millions and a quarter by Pennsylvania, and nearly nineteen millions by Ohio. The state which raises the greatest amount of Oats is New York—nearly 25 millions—Pennsylvania is next: nearly 19 millions. The largest amount of rye is raised in Pennsylvania, 9½ millions bushels; buckwheat also, two and a half millions. 15 millions of Indian corn were raised in Pennsylvania; in Tennessee 67 millions. 9 millions bushels of potatoes were raised in this state, N. York 26 millions, Maine 10 millions. 441,000 lbs. of tobacco were raised in Pennsylvania, 26,000 lbs. of silk, 1,878,000 lbs. of sugar, and 19,000 gallons of wine made. The total product of the whole country are as follows: Wheat 100,310,855 bushels, Barley 3,220,721, Oats 145,-929,966, Rye 24,280,271, Buckwheat 7,959,410, Indian Corn 484,618,316, Potatoes 105,756,133, Hay 15,419,-806, Flax and Hemp 161 007 tons, Tobacco 185,721,554 lbs., Cotton 747,660,000 lbs., Rice 89,879,145 lbs., Silk 315,765 lbs., Sugar 126,400,310 lbs., Wine 139,240 gals.

[*From the Mass. Ploughman.*]

LEGISLATIVE AGRICULTURAL CONVERSATION.

Tuesday evening was exceedingly stormy, yet we had a good number to attend the meeting; the Hon. Mr. Allen in the Chair. The subject of the conversation of the evening was, *Fruits and Fruit Trees.*

Maj. B. WHEELER of Framingham, was requested to open the subject. He said he did not expect, when he came in, to speak; he came to hear; but as he took an interest in the cultivation of fruits, he would not decline. He said when he first removed to Framingham, 44 years ago, there was but little table fruit that could be procured in town. There were cider apples enough, and large quantities of cider were made for market, but he found very little choice fruit.

He considered fruit to be a promoter of health, and that our climate will produce a great abundance, and better for our use than tropical fruits.—Apples he thought of more importance than any other kind; pears and apples can be cultivated on any soil that is not wet. He had raised excellent apples and pears on a poor gravelly knoll by plowing deep, manuring, and keeping the ground broken; even the Roxbury Russet, that was supposed to require a clayey soil, had grown very fair in his orchard. He now finds no difficulty in keeping apples through the whole year.

Peaches he had more trouble with. On his plain ground he had not succeeded in raising fruit more than one year in five; yet some near neighbors had an annual supply. It was owing to a different soil or a different exposure on higher ground.

Plums have been an uncertain fruit with many till last year; but he has had no trouble with the common enemy, *the wart;* though unfavorable weather spoils plums, causing them to crack open.

Cherries he had raised in abundance without any difficulty. In grafting trees, he practices cutting off *part* of the top of a full grown tree, when its fruit does not suit him, and grafting the limbs; next year cut more and keep the tree bearing fruit all the time while you are gradually changing its top. He had used the common wax, made of tallow, beeswax and rosin, and he disliked it; he found it poisoned the end of the limb, or the wax caused too much heat in the stock. His scions would barely live but would not grow.

MR. STONE, of Hardwick, inquired what kind of soil Major W. had found most suitable for the pear. He had seen the trees in soil that seemed to be wholly made up of various materials carted together, looking unnatural, and the trees flourished. Major W. said he did not care so much what the soil was if it was not too wet.

REV. MR. SANGER, of Dover, said he had been through Major Wheeler's garden and orchard, and he could bestow as high encomiums on his fruits as he had, at a former meeting, on the grasses and hay of the gentleman in the Chair, Mr. Allen. He had eaten very excellent fruit at Major Wheeler's that grew in the gravelly orchard. He would now ask him in what manner he used peat on his grounds. Maj. W. said he had formerly mixed lime with it, but he did not find it was of any service—he puts one load of stable manure to two loads of peat and finds the whole equal to three loads of stable manure. He has sometimes spread peat alone and found it very serviceable; (this was on a warm gravelly soil.)

The Hon. B. V. FRENCH, of Braintree, remarked that gardeners had now greatly the advantage over those of former years. We have now the means of circulating information extensively, and of finding the best kinds of fruit. He had often been deceived in the kinds of fruit that he had taken great pains to procure. He has upwards of 200 kinds of grafted apple fruit in his orchards, and many of these are not worth cultivating. He means to reduce the number down to 30. He advises orchardists to procure the most thrifty trees and then a skilful man, at a proper time, to set the best grafts from trees whose fruits are known with certainty.

Mr. F. said he had suffered from a want of proper labelling of trees that he had purchased, and from hiring his grafting by the job. Some jobbers would charge a certain price for each scion that should live, and they would take care to set scions so that they would barely live through the season—this was done by making the bark of the scion *cross* the bark of the stock, instead of *corresponding* with it; making it sure to get a little of the sap of the stock, and sure to get but little.

He has early fruits, and late fruits that will last through the winter, but he has not found a supply for October and November. He has the *Fameuse*, or Canada apple; good from November to January.

Heath's Nonsuch he considered a good fruit. He named two or three others which we could not hear distinctly. One or two kinds only of imported ones, he thought worth propagating. Our own prove better.

Of Pears he wanted more from Europe, and though many of the imported kinds did not succeed well yet others did. He praised highly the *Dutchess De Angouleme* pear, and spoke of sales of the fruit at enormous prices—50 cents a piece had been paid for them.

Plums had not done well with him. *Peaches* had not turned yellow as at the south. Of *Currants* he spoke of various kinds, and of *Raspberries* that could be cultivated without any difficulty—the *Strawberry* also would grow anywhere if it was cultivated. In grafting he prefers clay to any kind of wax.

MR. J. BRECK cautioned farmers not to make the soil excessively rich for pear and apple trees. He knew a man who had lost all his finest pear trees by placing strong liquid manure among them; the bark burst off and the trees died.

MR. BUCKMINSTER said he hoped the audience would note what the gentleman from Braintree had said in relation to grafting by the job. He had suffered by that kind of grafting—the scions living for a few weeks only. He preferred clay to any kind of wax whatever. As to imported trees he agreed that we have better at home. He reminded gardeners of what Mr. J. Wells of Dorchester had said—that he had travelled through Europe and had found no fruits equal to our own; that apples particularly, of American growth, were far superior to any he found in England or France.

Mr. B. warned farmers not to despair even though our facilities for transportation are so greatly improved. If steam brought in the early peaches of New Jersey to annoy our gardeners, it was equally active in transporting to distant shores our own surplus fruits and other products. That by means of steam we send our peaches to Maine and New Hampshire, where none could be grown, and where but very few were sent before steam power was introduced.

At nine the meeting was adjourned to the next Tuesday evening, at seven o'clock The same subject for conversation continued,—viz., *Fruits and Fruit Trees.*

Prepare without delay for a vigorous spring campaign.

TOBACCO IN KENTUCKY—CORN.

To the Editors of the Louisville Journal:

PROSPECT HILL, Jan. 20, 1845.

I some time since placed in the hands of Mr. Metcalf, of Maysville, a small package of tocacco seed for you, which has probably been received ere this. You will recollect that I had promised to procure for you, at the proper season, some seed of our most approved kind of tobacco. When I placed this seed in the hands of Mr. Metcalf, (who was about going to Louisville,) I had not seen the friend who had left it for me, in Washington, and could not then give a description of it. I have since seen him, and he informs me that it is what is called "the stand up Burley," (by some called the round leaf Burley,) in contradistinction to a larger species of Burley, whose leaves, instead of standing erect, run out nearly horizontally. This species of tobacco is more highly approved than the "Summerville," for cigar wrappers. It is not so tender, and comes more uniformly of the desirable color. It should be planted early, so as to admit of cutting, during warm weather, when it will cure of a better color. It must be planted pretty close—three and a half feet by eighteen to twenty-four inches, according to the strength of the ground, and ploughed only one way. The design of close planting is to make the tobacco grow fine, and to give an increased number of plants. It should be topped to fifteen or eighteen leaves, exclusive of the ground leaves, which are unfit for use. Plant beds should be prepared as early as the weather will admit, but may be sown any time in February, though early sowing is desirable, in order to early planting.

In your remarks upon my experiment on planting corn, you recommend an experiment upon the drill method. I think it probable that a small increase of product, in that way, might be procured, but it is subject to disadvantages, in cultivating a large crop, which, in my opinion, will more than counterbalance the increased product. To plant three feet each way, and *two stalks* in a hill, will admit of plowing both ways, and give *two* stalks for each nine square feet. If the ground be laid off three feet one way, and planted the other, so as to leave *one stalk* for each eighteen inches, the number of stalks for each nine square feet will be the same. The advantage of this mode of planting will be that each stalk will stand *singly*, and will thus afford a probability of *earing* to better advantage. The disadvantages will be, that there will be *double labor in dropping, thinning out*, and *hoeing*, because there will be just double the number of hills. And secondly, there will be a step of eighteen inches between each hill, which must be kept clean by hoes, *until the corn is large enough to lap the dirt up against it*, so as to cover small weeds and grass. And thirdly, by ploughing constantly in the same direction, the soil is thrown into ridges, leaving the centre between the rows in deep furrows, thus rendering it more troublesome to plough, and more difficult to lap the dirt against the corn, so as to prevent the growth of weeds and grass, and consequently rendering it necessary to go over the corn a second time with the hoes, or else suffer the corn to become foul in the rows.

But when planted in squares, the ploughs can run both ways, and thus keep the ground more level; and render it easy to keep the hills clean, after *single hoeing*, as the corn by that time will admit of lapping up the dirt against the corn *each way*. These views are not merely *theoretic*. I have tried, by actual experiment, the drill method of raising corn, and I am so fully persuaded that no good can result from it, that I cannot recommend it, as a general practice, though as a mere experiment, it may serve to show the utmost quantity of corn which may be produced from a given quantity of ground.

But, although a greater yield *per acre* may thus be produced, it by no means follows that this method of culture is the best. In judging whether the drill method ought to be adopted, we must consider whether the increased quantity per acre will justify the *increased labor*, and the greater exhaustion of the soil, (which is always in proportion to the crop produced,) and the worse condition in which it is left by throwing it in high ridges with deep furrows which serve as drains to wash off the soil. This last objection, of course, applies only to rolling lands, as ours generally are. Yours, truly, A. BEATTY.

[*From the Floridian.*]

MODE OF CULTIVATING TOBACCO IN THE ISLAND OF CUBA.

Your nurseries are the first to be attended to, in your preparation for a crop, by selecting at the proper season a

rich and tolerably moist piece of new ground, and prepare it by burning it off very clean, and breaking it up. The seed is then to be sown broadcast upon it, and when they are up, they are to be overlooked daily, to see that the cut-worm does not commit ravages among the young plants; and as fast as the plants arrive at a proper size, they are to be transferred to the Tobacco field, to make room for the smaller plants of the nursery. As casualties frequently arise to destroy some of the nurseries, it is necessary to guard against a probability of not having a sufficient number of plants, by making three or four nurseries, at an interval of one or two weeks each. Much attention should be observed to keep both your nurseries and field very clean, particularly of grass, and for that reason new lands are preferred for both. In Cuba they plant on an even surface, and disturb it as little as possible with the hoe, only picking out the grass or weeds which spring up. The plants, when transferred to the field, are to be planted in squares, at about from two to three feet apart, according to the strength of the land. The high lands in Cuba are such as produce the quality of Tobacco, both as to strength and color, that suits the American market best, and such lands correspond nearest to our high hammocks. The greatest enemy to the plants, both in the nursery and in the fields, (while small,) is the cut-worm, which has to be looked after early every morning, and wherever they have eaten the plants, they are to be found and killed, either on the plant, or on the ground near it. When the plants gets to be larger, then the large green Tobacco worm is to be constantly guarded against, and the suckers also continually broken off as fast as they appear, and when the Tobacco is judged to be of a sufficient height, it is to be topped and allowed to mature for cutting. The time of maturity is ascertained by the leaves changing gradually their color, begining at the bottom leaves, from their deep green growing color, to a yellowish green; but if this is not sufficiently obvious, and you deem your Tobacco ripe, you may test it by crushing together the tip of any of the upper leaves, which, if it snaps, is a sign of its being ripe, but on the contrary, if it does not snap, it is not fully matured. When ripe for the knife it is cut down near the ground, leaving two suckers, which have been spared a week or two prior, ready to grow up and produce a second crop, and also a third crop may be realized in the same manner. The Tobacco is to be conveyed carefully in wide thongs of cowhide to the house, to be hung up; a shed is preferred, with free space for ventilation beneath, and after tying the plants together, two to each string, and leaving space enough between them to insert a wooden peg, you hang them up, by intruding them above each rafter up to the ridge of the house, being careful not to hang them so near that they will touch or crowd each other in drying, or your Tobacco will mould. Also when the weather is moist, you must make small fires enough under it, to keep out the moisture, but not enough to heat your Tobacco. When the leaves are perfectly dry, the whole are to be taken down, and placed in a press for a few hours, the object of which is, if the Tobacco is too dry to strip off without breaking the leaves, that they may become soft and pliable, but great care must be taken that it does not heat, and it must be strictly examined, by inserting the hand to ascertain that it becomes not too hot. The press is made by putting rails or poles crosswise of each other, in form of a rack, and placing cow-hides under, over and around the Tobacco, and placing upon it something somewhat weighty. It is then to be stripped leaf by leaf from the stock, and being selected, the wrappers from the fillers, to be tied at the butts, and prepared for market. It is sometimes usual to put it again in press after being stripped.

Treatment of Sheep.

Messrs. Editors: In your last paper, I observed a notice of a disease incident to sheep, which has not yet found a name in this part of the country. Permit me to say that I believe it to be the same as that known as the dry murrain in the uplands in England. You can draw your own conclusions however of the similarity. In the low lands in Europe this complaint is not practically known, probably from the fact of the sheep never being without green esculent food. The ground is seldom covered with snow so as to prevent the sheep having access to the grass, and if it is, they are supplied with turnips; but in the high lands where turnips are not to be had, the winter more severe and their food necessarily dry hay, the same disease, viz: a total absence of moisture in the contents of the stomach prevails, and heavy losses sustained in consequence. I have known oil cake given in small quantities which was found to prevent the disease entirely. A cold dry atmosphere with dry food, and not in many instances very favorable access to water, will account for its appearance amongst our flocks here as it does in the high lands of England. One ounce of ground oil cake with one ounce of corn meal or bruised oats will be sufficient. When it is found to have a cathartic effect, let it be discontinued for a few days.

In countries where the high price of sheep render their preservation and improvement a matter of grave importance to the stock farmer, he is led to adopt such means as from experience will not only enable him to preserve his sheep alive through the winter; but to have them in the best possible condition in the spring, and it is found that nothing contributes more to those desirable ends than salving in the fall. As some of your readers may not be acquainted with the process allow me to explain. To prepare the salve take equal proportions of tar and damaged butter or any kind of coarse grease, melt them together over a slow fire until thoroughly incorporated. When cold the mixture will be of the consistency of honey. The operator then in a sitting posture with the sheep on its back and its head towards him, opens the wool the full length of the body and parallel therewith in a straight line, taking then a little of the salve on the fore-finger of the right hand, place it in the opening and draw it towards him, distributing it regularly upon the skin. This done, make another opening three inches to the right hand, and so on until the whole body of the sheep has been gone over. The advantages are numerous, preservation against wet, inclement weather, an increase of ten to fifteen per cent of wool, and the total and absolute destruction of ticks. Farmers adopting this system would do well to see the operation performed by some one acquainted with it, as by that means the work would be very much lessened. From 2 to 3 ounces of salve per head is sufficient. Manufacturers give a preference to the laid wool, as it is called. It scours better and is never in any instance *set on* or matted, as is the case with a great deal of wool in this country.

A Farmer.

Chicago, Jan. 13, 1845. *Prairie Farmer.*

Mixing Soils.

"Some nine or ten years ago in the early part of my farming I had occasion to deepen a well, about six or eight feet. The earth thrown out was a tenacious blue clay, just damp enough to cut into lumps, and adhesive enough to remain so. After finishing the well, the man who had charge of the farm was at loss to know where to deposit it. Having a bare sandy knoll in one of the fields, which was not inaptly termed 'personal property' from its being wafted about by every breeze, here to-day and there to-morrow, it occurred to me that the clay would hold the sand and form a soil. I accordingly ordered it deposited there in heaps, the same as if manure. This was in the summer. In the fall the lumps were scattered over the surface and left to the action of the rain and frost. In the spring it was found to have broken down, crumbled and slaked like lime. These heaps were reduced and the clay evenly spread over the surface. The field received a coat of manure, was ploughed, and sown with oats and peas. That where the clay was applied, produced the largest and most vigorous growth, of any other part of the field. In the fall it was sown with rye and seeded down with timothy and clover. The rye as well as the clover was much more vigorous and heavier, on that than any other part of the field. In fact, the person who occupied the farm after I left it, informed me that he lost his crop of grass on that part in consequence of its lodging. Thus the *personal* was made *real or fast* property, and remains so to the present day.

"Having experienced such beneficial effects from mixing clay with sand I was afterwards induced to try what effect sand would have on a rather retentive soil. The garden at the Three Hills Farm, is a stiff clay loam resting on a strong tenacious clay subsoil, rather inclining to moisture. The second year after I purchased and took possession of it, I caused a coat of sand, from six to eight inches in depth, to be put on one of the squares, which was spaded in with the manure, and I had the satisfaction to witness the most gratifying and happy results—the crop on that square was far superior to any other in the garden. Since then I have caused over five hundred one-horse cart loads of sand to be put in the garden, and the effect is still visible although the sand has disappeared."—*Extract from Mr. C. N. Bement's Ad. before the Housatonic So.*

The American Agricultural Association.—The Society is established to collect, and diffuse correct information, throughout the United States, in Agriculture, Horticulture and Arboriculture and to promote the introduction of scientific knowledge in these arts. This object it proposes to accomplish by the following means:

1. By founding a Museum of seeds, fruits, specimens of choice varieties of plants, models of implements and buildings; pictures of improved animals; together with a collection of geological specimens, fossil manures and other objects interesting in Agriculture.

2. The establishment of a Laboratory for the examination of manures, composts, marls—and the original investigation of mineral food of plants, fruits and seeds.

3. The establishment of an Agricultural Library.

4. The procuring of original, practical, and scientific experiments in these arts; and essays, papers, and lectures for publication in a series of transactions.

5. The discussion at stated meetings of topics in these arts.

6. The establishment of an interchange of fruits, seeds, and scions, with other Societies.

President—Hon. Luther Bradish.

Recording Secretary—H. A. Field, M. D.
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Veterinary Surgeon—Mr. C. C. Grice, Grad. V. C.
N. Y. Tribune.

To kill Vermin on Cattle.—I have noticed an article in several of the agricultural papers recommending the use of oil or grease to kill lice on cattle.

It was said forty one years since that oil or grease was a good medicine, and I made the experiment on working oxen and cows, I had the care of at that time. It would be difficult to contrive a more nasty, unwholesome and infamous medicine than oil or grease. It will immediately collect the dust of the barn or field, and you cannot get it off. If you attempt to clear it you can do nothing with it. In a warm sunny day it will draw the sun, and keep your oxen ready warmed; I would as soon oil a good beaver hat to ride over a dusty road, as put oil or grease on my oxen or cows.

Since I made the above experiment I have made use of Scotch Snuff; card up the hair and sift the snuff into it, and lice will soon be absent. Or you may raise a few tobacco plants and nail a few laths over your stalls and place the plants on them to cure and remain there, and you will have no lice on your cattle.

Respectfully, yours, &c.

Daniel Leland.

—*Mass. Ploughman.*

American Bagging.—The production of Bagging in the United States, as we learn from the forth-coming report of the Commissioner of Pensions, is increasing fast. In Kentucky last year there were 500 hand-looms in operation, and each of these manufacture 400 yards, on an average, per week, or 20,000 yards per month, or 10,000,000 a year. Besides there are five power loom factories, in Indiana, Kentucky, and Ohio, which produce 3,800,000. In Tennessee 80 hand-looms produce 1,200,000 yards. Fifty hand looms in Missouri produce 750,000 yards. The total amount of Bagging estimated for the year, and manufactured in 1844 in the West, is 15,750,000.

The average quantity of bagging used in baling Cotton is six yards to the bale; and the amount manufactured in the year would bale 2,635,000 bales of cotton.—More than enough for the cotton crop of '41 and '45 by a large quantity.—*N. Y. Express.*

Death of Cattle from Dry Fodder.—James Grant, Esq., of Davenport, Iowa, informs us that on turning his cattle into the corn fields, after the corn was gathered last fall, several of them died from constipation. The death of the animals was so sudden, that cows which gave a good mess of milk at night, were dead the next morning: and oxen which worked as well as ever in the morning, died in the afternoon. After having lost several of the herd, among which was a valuable Durham bull, Mr. G. saved the remainder by administering heavy doses of Epsom salts.—*Alba. Cult.*

MILK SICKNESS.—We have published some articles lately which go to show that the long sought cause of this malady is at last discovered in a mineral substance of which arsenic forms a considerable part—which is found in certain springs and runs of water. Such springs have been discovered in various places in Madison co., in this state.

We believe the general supposition heretofore has been, that it was some plant eaten by cattle; though different persons have attributed it to different plants. It would deserve to be considered, in case that the cause is found in water or its sediment, whether the old opinion is entirely erroneous. Would it not be remarkable to suppose that certain plants growing about the runs where the poisonous water is found would take up enough of the poisen to produce the disease? A writer in the Boston Cultivator says, that a fruit tree which we knew, died in consequence of the emptying a large quantity of brine about its roots; and on examination the limbs of the tree were found encrusted with a deposite of salt; showing that the salt was carried up in the sap vessels and thus spread through all its parts. Might not such be the result in other cases. The matter is certainly worthy of continued examination. We see it recommended in the Alton Telegraph to change the name of the disease, which at present has no propriety in it, and call it Metoxicum.—*Prairie Farmer.*

SMUT.—Professor Johnston in a lecture lately delivered before the Chemistry Association, remarked that the sporules of this fungus are so exceedingly minute that it would take 2800 of them to cover an inch. There is no doubt, he says, but that they ascend through the sap vessels of the plant—for by examination it could be seen where they had come up; having left their coloring matter in the tubes of the stalk. After passing through the stalk, the smut fixes itself under the root of the flower, which it renders barren; and as the grain ripens, the puff balls ripen also, and burst; scattering a black dust, so minute that it takes 1,000,000 of them to lie across a single inch.

It may thus be seen how smut is propagated. Its particles are so small that thousands of them may attach to a kernel of wheat unobserved, and be sown with it.

Various substances will destroy its vegetating power, among which are blue vitriol, common salt, urine, and potash.—*Prairie Farmer.*

WHEAT.—It appears from an article in the Ohio Cultivator, an excellent paper recently established at Columbus, Ohio, that judging by the quantity of wheat passing the Ohio canal, the wheat crop of Ohio is decreasing notwithstanding a greater number of acres is every year sowed in wheat. The editor attributes this result to the fact that the soil is yearly losing the elements necessary to good straw and grain. In reply to the supposition that the decrease is caused by rust, the editor remarks as follows:

As an evidence that the cause of the failure of the wheat crop is not generally understood, we can state, from our own personal observation, that many fields in Ohio which were said to have been destroyed by *rust*, the past summer, were in reality very little affected by rust at all. The straw merely turned *brown*, because it had not the materials to give it a better color, and the berry did not *fill*, simply because the plant could not obtain the proper elements for it to fill with! When will farmers begin to study nature's laws and conform their practice to the lessons which she teaches?

NEW THEORY OF MILDEW.—We find it stated in the Canadian Agricultural Journal, that Mr. Haywood, lecturer on Chemistry at the Sheffield (England) Medical School, recently gave a lecture before the Norton Farmers' Club, wherein, among other things, he advanced what to us is a new theory for the formation of honey-dew and mildew.

Our readers are aware that many theories have been advanced; some attribute it to one thing and some to another. Mr. Haywood explains the phenomenon in this way. Mildew is caused by the rapid evaporation of water from the leaves of plants after a wet spring, when the salts the water contained were left on the surface of such plants as were already matured, while others, which were in a growing state, appropriated them to their uses.

Honey-dew was caused by an excess of carbon in the plant, which could only occur in dry weather, when the other ingredients could not be furnished for it to combine with.—*Maine Farmer.*

PULVERIZED CHARCOAL TO PREVENT ROT IN POTATOES.—*Mr. Editor:*—I see by your last number of the Ploughman, that gentlemen farmers of the Legislature have again commenced at the State House a discussion of matters and things in general for their own improvement and that of the community in agriculture, and that the first topic was the disease in potatoes the past season. I, last October, saw a gentleman in the county of Berkshire from New Jersey, who informed me of a process of raising potatoes, that with him succeeded to a charm. His potatoes were *first best*, both in quality and quantity, while there was a general failure among his neighbors in consequence of the rot. The process was this, he went to New York and procured a quantity of pulverised charcoal that had been used for the purpose of rectifying spirits, mixed it with his compost heap and spread it broad cast upon the land planted.

Whether the idea be worth anything to the public, judge ye, and make such use of it as you please.

Your humble servant, M.

Hartfield, Jan. 15, 1845. *Ploughman.*

SOWING GRASS.—We trust that the farmers will this year abandon the practice of sowing oats with their grass seeds. The plan recommended by Lewis Saunders, Esq. in the Dollar Farmer, is the proper one. Prepare the ground thoroughly by plowing and harrowing, sow the grass seed alone just after the last harrowing, and cover by dragging a slab or door over the ground, the driver standing upon the slab or door. It is well to soak the seed, and they should be sowed when the ground is quite moist—sow *thick* and *early*. If these directions are observed, the sowed grass will take immediate possession of the soil and keep it. If weeds should appear, pass a sythe over the surface. Treated in this way, orchard grass will make an excellent pasture the first season, and will present a thorough sod. A heaping bushel of orchard grass seed is required to the acre.—*Louisville Journal.*

To Sweeten Rancid Butter.—An agriculturalist in the neighborhood of Brussels, has succeeded in removing the bad smell and dissagreeable taste of rancid butter, by mixing and beating with it chloride of lime. The operation is said to consist in beating the butter, with a sufficient quantity of water, into which is put 25 to 30 drops of chloride to 2 pounds of butter. After being mixed till all parts are in contact with the water, it is left for an hour or two, then with drawn and washed anew in fresh water. —*Alb. Cult.*

PRICE 100 DOLLARS.

Reaping machines simplified, and their durability very greatly increased, will cut as fast as any 1 made prior to 1841; two horses are geared abreast, and are relieved from the once objectionable weight, and the draught is very much diminished. The value of this late improvement has been tested by Wm. Butler and Jacob Staley, of Shepherdstown, Va. who if applied to will give it the highest character.

The large Reapers are made as usual at $170—medium size will be made to order.

My Corn and Cob Crusher, so well known in the South, stands unrivalled—price $25 to $35. OBED HUSSEY.

Baltimore, Jan. 7, 1845. ja 9

FARM FOR SALE.

The advertiser will sell the Farm on which he now resides, situated in Baltimore county, about 30 miles north of the city, and about 4 miles from the Susquehanna rail road, containing 100 acres of land, about two-thirds of the same is under good cultivation, the balance is well timbered; the fields lay well to the sun, and are well watered; there are a number of excellent springs and a sufficiency of water for a mill; there is a quantity of good meadow, and much more can be made; also a variety of choice fruit; a stone Dwelling House, 26 by 36 feet, 3 stories high, a log barn with stables and a threshing floor; and other conveniences. The whole of this property can be procured at a low rate for cash, or for notes on interest with good security or by way of exchange for property in the city. Enquire at this office. ja 1

DEVON BULL FOR SALE.

He is of the best breed, very gentle, 4 to 5 years old. The owner having another for his own service, has no use for him, and he will be sold a bargain. Apply at this office. de 18

BALTIMORE MARKET, Feb. 17.

Beef, Balt. mess,	9a	Butter, Glades, No.	1,13
Do. do. No.	1, 8a	Do. do.	2, 7a11
Do. prime,	6a	Do. do.	3, 5a7
Pork, mess	11a12	Do. Western	2, 6a
Do. No. 1	10½	Do. do.	3, 5a6
Do. prime	9½	Lard, Balt. kegs,	1, a7½
Do. cargo,	a	Do. do.	2, none
Bacon, hams, Ba. lb	7½a8	Do Western,	1, 7a7½
Do. middlings, "	a5¾	Do. do.	2, 5a5½
Do. shoulders, "	5½a	Do. do. bls	1, 6a6½
Do. asst'd, West.	6	Chéese, casks,	6
Do hams,	7½a8	Do. boxes,	5a8½
Do. middlings,	5¾	Do. extra,	12a15
Do. shoulders,	5½a		
COTTON—			
Virginia,	9a10	Tennessee, lb.	
Upland,	6¼	Alabama,	6¾a
Louisiana,	6¾	Florida,	10a12
North Carolina,	10a11	Mississippi	
LUMBER—			
Georgia Flooring	12a15	Joists & Sc'ling, W.P.	7a10
S. Carolina do	10a12	Joists & Sc'ling, Y.P.	7a10
White Pine, pann'l	25a27	Shingles, W. P.	2a9
Common,	20a22	Shingles, ced'r,	3.00a9.00
Select Cullings,	14a16	Laths, sawed,	1.25a 1.75
Common do	8a10	Laths, split,	50a 1.00
MOLASSES—			
Havana, 1st qu. gl	30a31	New Orleans	24a
Porto Rico,	29¾a	Guadaloupe & Mart	26a28
English Island,		Sugar House,	28a36
SOAPS—			
Baltimore white,	12a14	North'rn, br'n & yel.	3¼a4½
brown & yell'w	4½a5½		
TOBACCO—			
Common	2 a 3½	Yellow,	8 a10
Brown and red,	4 a 5	Fine yellow,	12a14
Ground leaf,	6 a 7	Virginia,	4 a 9
Fine red	6½a 8	Rappahannock,	
wrappery, suitable		Kentucky,	3 a
for segars,	8a13	St. Domingo,	13 a11
Yellow and red,	7a10	Cuba,	15 a38
PLASTER PARIS—			
Cargo, pr ton cash	3.50a	Ground per bbl.	1.12a
SUGARS—			
Hav. wh. 100lbs	9a10.50	St. Croix, 100lbs	7.00a8.00
Do. brown	a7.50	Brazil, white,	a
Porto Rico,	5.50a6.40	Do. brown,	
New Orleans,	5a 5.25	Lump, lb. c.	

FLOUR—We quote

Superfine How. st., from stores, bl		$4.25.
Do. City Mills,		4.37.
Do. Susquehanna,		
Rye, first		3.18a
Corn Meal, kiln dried, per bbl.		2.25
Do. per hhd.		11.75

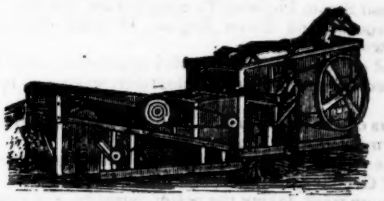
GRAIN—			
Wheat, white, p bu	90a100	Peas, black eye,	50a55
" best Va red	85a90	Clover seed, store	$4.25
" ord. to pri. Md	75a90	Timothy do	2.a2.25
Corn, white,	42a43	Flaxseed, rough st.	1.35
" yellow Md.	43a	Chop'd Rye, 100 lbs.	1.25
Rye, Md.	67a	Ship Stuff, bus.	20a
Oats, Md.	27a	Brown Stuff,	15a
Beans,	110	Shorts, bushel,	10a
FEATHERS—perlb.			31a
COFFEE—			
Havana,	7 a 8	Java, lb.	10 a12
P. Rico & Laguay.	5½a6¾	Rio,	6¾a7¼
St. Domingo,	5¾a 6	Triage,	3½a 4¼
CANDLES—			
Mould, common,	a10	Sperm,	30a31
Do. choice brands,	10¼	Wax,	60a65
Dipped.	a 9		

and 43 cts. for yellow. Oats are worth about 28 cts. from stores.

Tobacco.—The market this week has been very quiet. The sales of Maryland are confined to very limited parcels at quotations viz: —Inferior and common $2a $3; middling to good $3.50 a $5; good $6 a $7.50; and fine $8a $14—Small sales of Ground Leaf at $3a $7, for inferior to good parcels. There is nothing doing in Ohio and former prices are continued, viz Common to middling $3a $4.50; good $5a $6; fine red and wrappery $6.50 a $10; fine yellow $7.50a 10 and extra wrappery $11 a $13. We note a sale of 20 hhds. Mason County, Ky. Tobacco at $4.50a $12. The inspecti's of the week are 62 hhds. Maryland; 31 hhds. Ohio; and 28 hhds. Kentucky—total 121 hhds

Hogs.—Supplies of Live Hogs come in sparingly, and the price has advanced to $5 per 100 lbs. with sales. Sales of Killed Hogs in the course of the week at $4.75 per 100 lbs.

Grain.—Sales of small lots of red Wheat, brot in by wagons, 85a90 cts. Small sales of Corn from stores at 42a43 cts. for white,



WHITMAN'S THRASHING MACHINE & HORSE POWER DEPOT, No. 2 Eutaw st., opposite the Eutaw House, where the subscriber now offers for sale all his new improvements in the Thrashing-machine and Horse-power line, consisting in part of his new SEPARATOR, patented March 20th, 1844, which thrashes and cleans the grain at one operation, and is considered the greatest labor saving machine, and of the most value to the farmer of any machine ever invented in this country.

NEW STRAW CARRIERS—These machines thrash and separate the grain from the straw in a rapid and perfect manner, and are highly approved by all.

Improved CYLINDER THRASHERS—Warranted to thrash faster than any other kind of thrashers that can be produced.

Improved HORSE POWERS, on the rail-way principle, for one or two horses. These machines are durable, possess double the power of the common kind, and occupy about one eighth of the room. All of the above are made of the best materials, by experienced workmen, and warranted. I will furnish a man to go out with them and set them up in any part of this State, if desired.

As this is no humbug, all who feel an interest in agriculture are respectfully invited to call and examine for themselves.

All orders addressed to the subscriber, Baltimore city, will meet with prompt attention. EZRA WHITMAN, Jr.

jy 17

NEW AND IMPROVED POUDRETTE,

Made by the Lodi Manufacturing Company of New York, may be obtained by application to BRICE & SMITH, Agents,
fe 20 3m No. 6 Bowly's wharf, Baltimore.

A SITUATION AS MANAGER OF A FARM,

Is wanted by an active Man who has had considerable experience in his business in every branch, including the breeding and raising of stock generally—He can give satisfactory references, and will devote his utmost abilities and energies to the service of his employer. Enquire of the Editor of the American Farmer.
fe 20 4t*

PERUVIAN GUANO.

The balance of the cargo of Peruvian Guano received by the undersigned per ship "Orpheus" from the Chincha Islands, for account of the Peruvian Guano company, is offered at the following rates.

Fixed price per 100 lbs. $2.50
with *discount* as follows:
On not less than 5 tons of 2000 lbs. each, 10 per cent.
Over 5 and less than 10 tons, 15 do
Over 10 tons, 20 do

This cargo is warranted to be pure and of the best quality.

For sale in bags (of about 130 lbs. each) in parcels of one ton and upwards by

SAML. K. GEORGE,
No. 2 German st., Baltimore,
Agent for the Peruvian Guano company.

Baltimore, 5th Feb. 1845.

PERUVIAN GUANO.

The subscriber is prepared to furnish to order, Guano of the cargo imported by Saml. K. George, esq. Agent of the Peruvian Guano Company, and warranted genuine, at 3 cents per lb. for one or more bags, less than a ton in weight, or $2.50 per 100 lbs. for one or more tons.

This cargo is warranted to be pure and of the best quality, and is in the original bags (of about 130 lbs. each.) All orders to insure attention, must be accompanied with the cash.

SAMUEL SANDS,
Feb 5 office of the American Farmer.

GROUND PLASTER.

The subscriber is now engaged in the grinding of Plaster of Paris for agricultural purposes, and would respectfully inform Farmers and dealers that he is prepared to furnish it of the best quality at the lowest market price, deliverable in any part of the city, or on board Vessels free of expense, application to be made at the Union Plaster Mill, near the Glass House, or at the office No. 6 Bowly's Wharf, corner Wood street. P. S. CHAPPELL, or,
. 3. WM. L. HOPKINS, Agent.

POUDRETTE

Of the very best quality for sale. Three barrels for $5, or ten barrels for $15—delivered free of cartage by the New York Poudrette Company, 23 Chambers street, New York. Orders by mail, with the cash, will be promptly attended to, and with the same care as though the purchaser was present, if addressed as above to D. K. MINOR, Agent.

A supply now on hand from the N. York establishment, by the single barrel, or larger quantity. For sale by

SAML. SANDS,
je 19 office of the Farmer, Baltimore

JAMES MURRAY'S

PREMIUM CORN AND COB CRUSHERS.

These already celebrated machines have obtained the premium by a fair trial against the other Crushers exhibited at the Fair held at Govanstown, Balt. co. Md. Oct. 18th, 19th and 20th, 1843, and the increased demand enables the patentee to give further inducements to purchasers by fitting an extra pair of grinders to each machine without extra charge. Prices $25, 30, 35, 40, 45.

ALSO, small MILLS, which received a certificate of merit, for $15.

I have also superior CUTTING BOXES, such as will bear inspection by either farmers or mechanics.

Also, Horse Powers, Mills, Corn Shellers, Mill and Carry-log Screws, small Steam Engines, Turning Lathes, &c. &c.

Also, a second hand Steam Engine, 16 horse power, and the works for two Saw Mills.

Any kind of Machine, Model or Mill-work built to order, and all mills planned and erected by the subscriber, warranted to operate well.

☞Orders can be left with J. F. Callan, Washington, D. C. S. Sands, Farmer office; or the subscriber,

Mr. Abner Linthcum, jr., and all Machinests are invited to a fair trial of Grinding against my Corn and Cob Crushers, and if I do not do more work, taking the power, quantity, and quality into consideration, I will give them my machine gratice.

Patent Rights for sale by the subsbriber.
o 8 JAS. MURRAY, Millwright, Baltimore.

CLEAZY'S IMPROVED SELF-SHARPENING PLOUGH.

J. S. EASTMAN, Pratt street, a little west of the Baltimore & Ohio rail road Depot, would invite public attention to this superior implement, both as to its simplicity, cheayness and good work with light draft. He will furnish patterns to manufacturess living out of this state on reasonable terms. may 1

HARVEST TOOLS.

In store and for sale by J. S. EASTMAN, Pratt street, nea Charles, Wolf's very superior Grain Cradles, (such as I have been selling for the last five years;) Grain and Grass Scythes; steel and wood Hay Forks; an assortment of Hay Rakes, Horse Powers and Threshing Machines, of different patterns, for 2 and 4 horses; Wheat Fans, plain and expanding Corn and Tobacco Cultivators, Corn Planters, my superior Straw Cutters, of all sizes, with wood and iron frames. Also a large assortment of PLOUGHS, of all sizes, and other farming implements. May 2

R. SINCLAIR, jr. & Co's. CATALOGUE

FOR 1845.—(*Continued.*)

☞Orders for any article in the annexed catalogue will meet with prompt attention, addressed to S. SANDS, publisher of the American Farmer, or to R. Sinclair, jr. & Co. Light st. wharf.

POT & SWEET HERB SEEDS.

(Sow from April to May.)

SIX CENTS PER PAPER.

Garlic,
Borage,
Caraway,
Pot Marigold,
Lavender,
Sweet Basil,
Sweet Marjorum,
Anise,
Rosemary,
Red Sage,
Summer Savory,
Winter do
Thyme,
Fenugreek,
Medicinal Herb Seeds.

SUNDRIES.

Onion Sets, red and white, $2 a $4 per bushel.
Top or Tree Onion Sets, $3 per bushel, and 19 cents per quart.
Potato or Cluster Onions, very productive, 37½cts per doz.
Cabbage Plants, 50 cents to $1 per hundred.
Tomato Plant, 25 cents per dozen.
Cauliflower, $1.50 per hundred.
Brocoli, $1 per hundred.
Egg Plants, 37½ cents per dozen.
Lettuce, 50 to 75 cents per hundred.
Pepper Plants, 25 cents per dozen.
Mushroom Spawn, in parcels, 50 cents.

POTATOES, *Early Kinds*,
Early Kidney.
" Boston Round.
" Nonpareil.
" Mercer.
Garlic Sets.

ANNUAL FLOWER SEEDS.

SIX CENTS PER PAPER.

Sow from middle of April till last of May.

Amaranthus,	Globe, purple,	Honeysuckle,	French,
do	do white,	Ipomea	mixed,
do	do three coloured.	Ice Plant,	
		Immortal Flower,	white,
Ageratum,		Job's Tears,	
Asters, China,	white,	Larkspur,	superior, mixed,
	purple,	Lupins,	white,
	rose,		rose,
	lilac,		blue,
	blue,		yellow,
Argemone,	gr. flowering,	Love lies Bleeding,	
Ageratum,	Mexican,	Lavatera,	
Animated Oats,		Marigold,	French,

SINCLAIR & CO'S. WHEEL SELF-SHARPENING PLOW.

This plow has a long high breasted mould board, combining the concave and convex shape, and formed as late experience has dictated. The points and shears are made to be reversed when they become dull, forming a complete self-sharpening principle, and constructed full as simple and strong as the common *Bar-shear*. The point and shear being made with wrought as well as cast iron, may be used with perfect safety in clean as well as the roughest lands, thus obviating the objection generally advanced by farmers whose lands are rough and stony. Like the above "*Dolphin Plow*," they have attached to the landside a *wheel*, or what is termed a *rolling landside*, which produces all the advantages ascribed to the Dolphin plow,—farmers however, who object to the wheel, can have it removed and a heel piece substituted, which will reduce it to the plan of the common Davis Land-side, and cost about one dollar less. At present we have only 3 setts of patterns completed, viz;

A light plow for two horses,
A heavy do do do
A do do do do with left hand mould board.

All of which will be sold at current prices. During the season we expect to complete several more similar patterns, which we intend shall embrace every size that may be wanted.—[*See plate page* 45.]

DOUBLE MOULD BOARD.

Two sizes; a very useful plow for draining and plowing up potatoes at the time of gathering the crop, 6a8 50

THE GARDEN HAND PLOW

For cultivating vegetables, making drills, &c.; this implement with a man to push it will do as much work as a dozen men with hoes, leaves the ground in better order, and cultivates the vegetables more thoroughly. Price with extra irons, $5

PATENT SEEDING PLOW, OR CORN CULTIVATOR.

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